

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A frame joint structure for a vehicle comprising:
 - a first frame member being U-shaped in cross section and having a first sidewall, a second sidewall, and a bottom wall and defining an opening;
 - a second frame member, similar to the first frame member, and being U-shaped in cross section and defining an opening, said second frame member having an end portion connected to at least one of the first and second sidewalls of the first frame member so as to define a joint between the first and second frame members;
 - a reinforcing member received in both the first frame member and the second frame member, said reinforcing member extending through said joint and into said first frame member a first predetermined length so as to have a free end adjacent said joint and extending in said second frame member a second predetermined length so as to have another free end adjacent said joint;
 - a plate member closing the openings of the first and second frame members so as to form closed cross sections of the vehicle frame joint structure; and
 - a foamed resin surrounding the reinforcement member and filling a space defined by the plate member, the first and second frame members and the reinforcing member, such that the reinforcement member is spaced from the first

and second frame members and the plate member by the foamed resin, and wherein the foamed resin results from foaming an unfoamed resin applied uniformly onto at least upper and lower surfaces of the reinforcing member, and wherein the foamed resin serves to space said reinforcing member from said first and second frame members and cooperates with said reinforcing member to strengthen said joint.

2. (Previously Presented) The joint structure according to claim 1, wherein the reinforcing member is a generally T-shaped open-ended pipe, and wherein the unfoamed resin is applied only to the reinforcing member such that the subsequently foamed resin secures the reinforcing member to the first and second frame members and thereby reinforces the first and second frame members only in a vicinity of the joint.

3. (Previously Presented) The joint structure according to claim 1, wherein the reinforcing member is a generally L-shaped open-ended pipe, and wherein the unfoamed resin is applied only to the reinforcing member such that the subsequently foamed resin secures the reinforcing member to the first and second frame members and thereby reinforces the first and second frame members only in a vicinity of the joint.

4. (Previously Presented) The joint structure according to claim 1, wherein the plate member, the first frame member, and the second frame member are made from a first metal material while the reinforcing member is made from a second

metal material, said first metal material being different than said second metal material.

Claims 5 - 6 (Cancelled)

7. (Withdrawn) The frame joint structure according to claim 1, wherein the reinforcing member is formed as a solid plate, and wherein the unfoamed resin is applied only to the reinforcing member such that the subsequently foamed resin secures the reinforcing member to the first and second frame member and thereby reinforces the first and second frame members only in a vicinity of the joint.

8. (Withdrawn) The frame joint structure according to claim 7, wherein the plate member and the first and second frame members are formed from a first metal material and are affixed to one another by welding.

9. (Withdrawn) The frame joint structure according to claim 8, wherein the reinforcing member is formed from a second metal material, and wherein the first metal material is different than the second metal material.

10. (Cancelled)

11. (Previously Presented) The frame joint structure according to claim 1, said second frame member having an end portion connected to one of the first and second sidewalls of the first frame member, and wherein said one of said first and

second sidewalls of the first frame member has a hole formed therein; and,
wherein said hole is larger than a cross-sectional dimension of said reinforcing member such that said reinforcing member may freely extend through the hole in the first frame member, and whereby an annular space surrounding said reinforcing member and said one of said first and second sidewalls of said first frame member at said hole being filled with said foamed resin.

12. (Previously Presented) A frame joint structure for a vehicle comprising:
a first frame member being U-shaped in cross section and having a first sidewall, a second sidewall, and a bottom wall and defining an opening;
a second frame member, similar to the first frame member, and being U-shaped in cross section and defining an opening, said second frame member having an end portion connected to at least one of the first and second sidewalls of the first frame member so as to define a joint between the first and second frame members;
a reinforcing member received in both the first frame member and the second frame member, said reinforcing member extending through said joint and into said first frame member a first predetermined length so as to have a free end adjacent said joint and extending in said second frame member a second predetermined length so as to have another free end adjacent said joint;
a plate member closing the openings of the first and second frame members so as to form closed cross sections of the vehicle frame joint structure; and
a foamed resin filling spaces defined by the plate member, the first and second frame members and the reinforcing member, wherein the foamed resin results from foaming an unfoamed resin applied uniformly onto at least upper and

lower surfaces of the reinforcing member, and wherein the foamed resin serves to space said reinforcing member from said first and second frame members and cooperates with said reinforcing member to strengthen said joint,

said second frame member having an end portion connected to one of the first and second sidewalls of the first frame member, and wherein said one of said first and second sidewalls of the first frame member has a hole formed therein; and,

wherein said hole is larger than a cross-sectional dimension of said reinforcing member such that said reinforcing member may freely extend through the hole in the first frame member, and whereby an annular space surrounding said reinforcing member and said one of said first and second sidewalls of said first frame member at said hole being filled with said foamed resin,

wherein the plate member is generally planar.

13. (Cancelled)

14. (Previously Presented) The frame joint structure according to claim 12, wherein the reinforcing member is formed from a second metal material, and wherein first metal material is different than the second metal material.

15. (Withdrawn) The frame joint structure according to claim 1, wherein the reinforcing member is an extruded open-ended tubular structure having a series of external grooves formed therein, said grooves serving to receive foamed resin to thereby connect said foamed resin to said reinforcing member, and wherein the unfoamed resin is applied only to the reinforcing member such that the subsequently

foamed resin secures the reinforcing member to the first and second frame members and thereby reinforces the first and second frame members only in a vicinity of the joint.

16. (Withdrawn) The frame joint structure according to claim 15, wherein said reinforcing member is generally L-shaped.

17. (Previously Presented) The frame joint structure according to claim 12, wherein the plate member and the first and second frame members are formed from a first metal material and are affixed to one another by welding.

18. (Previously Presented) The frame joint structure according to claim 17, wherein the reinforcing member is formed from a second metal material, and wherein first metal material is different than the second metal material.

19. (Previously Presented) The frame joint structure according to claim 11, wherein the plate member is generally planar, wherein the plate member and the first frame member are made of steel and the second frame member is made of an aluminum alloy, and wherein the plate member and the first and second frame members are affixed to one another by welding.